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STUDY PROJECT

JOINT DEPLOYMENT TRAINING, THE LOW COST OPTION

BY

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2 APRIL 1990

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The military strategy of the United States is global and emphasizes forward deployment for deterrence and forward engagement should that become necessary. This strategy requires predeployment of forces overseas, prepositioning of equipment in forward areas, and most importantly the capability to transport equipment and supplies from the United States. A balance of the elements, sealift, airlift and prepositioning is required to deploy and sustain U.S. forces overseas. Sealift delivers about 95 percent of the total tonnage of material required to deploy and to support a sustained (continued on back)

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operation. The remaining 5 percent is delivered by airlift, which comprises designated high priority units, personnel, and material. The ability of the United States to deter aggression, limit conflict, or wage war successfully depends on our country's ability to rapidly deploy and sustain fighting units. To achieve movement objectives units must have capable deployment managers, and the units must be capable of making a rapid transition from a peacetime to a wartime posture. That is to mobilize and deploy within stringent time frames. The crucial determinant is training.

USAWC MILITARY STUDIES PROGRAM PAPER

JOINT DEPLOYMENT TRAINING, THE LOW COST OPTION

AN INDIVIDUAL STUDY PROJECT

by

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ABSTRACT

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The military strategy of the United States is global and emphasizes forward deployment for deterrence and forward engagement should that become necessary. This strategy requires predeployment of forces overseas, prepositioning of equipment in forward areas, and most importantly the capability to transport equipment and supplies from the United States. A balance of the elements, sealift, airlift and prepositioning is required to deploy and sustain U.S. forces overseas. Sealift delivers about 95 percent of the total tonnage of material required to deploy and to support a sustained operation. The remaining 5 percent is delivered by airlift, which comprises designated high priority units, personnel, and material. The ability of the United States to deter aggression, limit conflict, or wage war successfully depends on our country's ability to rapidly deploy and sustain fighting units. To achieve movement objectives units must have capable deployment managers, and the units must be capable of making a rapid transition from a peacetime to a wartime posture. That is to mobilize and deploy within stringent time frames. The crucial determinant is training.

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THE LOW COST OPTION

CHAPTER I

INTRODUCTION

The traditional United States strategic doctrine since the 1960s has been one of flexible response. This policy has been the principal guiding force and thinking of American policy makers, the Congress and the Department of Defense. It has included in its spectrum the combination of conventional and nuclear forces to defeat potential enemies, in particular the Soviet Union. At this point in history, even with Perestrioka and Glasnost, our primary global military challenge is still the Soviet Union.

STRATEGIC MOBILITY

The flexible response doctrine with respect to Western Europe "depends on the prompt reinforcement by combat units from the United States. Within ten days of a decision to mobilize, the U.S. is committed to raise its strength in Europe to ten Army divisions, sixty tactical fighter squadrons, and one Marine amphibious brigade."[1] To accomplish this goal, the United States must have the ability to move these forces. This

capability is designated as Strategic Mobility. It is the ability to project military forces and the associated equipment and supplies in a timely manner from one theater to another. History shows the importance of strategic mobility. For instance, in the Second World War:

> The German military proved incapable of crossing the English Channel (except by air) and found it difficult to sustain its power on the North African side of the Mediterranean Sea.
>
> Even Europe and Asia, which share the same land mass, are connected by few road or rail lines of communication. In the Russo-Japanese War of 1904-1905, Russian ground forces in the Far East ultimately were defeated because the trans-Siberian railroad, unfinished in 1904 and still the only continuous land line of communication linking the Far East and European Russia, failed to provide adequate reinforcements and supplies to Russian forces fighting in Manchuria.[2]
>
> The great allied airborne drops in southern and central Holland in September 1944 failed to secure a bridgehead across the Rhine in part because there were not enough transport planes to deliver the three-division assault force simultaneously; the drops were spread over three days, thus dissipating the initial advantage of surprise.[3]

The United States currently cannot accomplish the mission to reinforce the European theater of operations. There simply are not enough sealift and airlift assets to meet deployment requirements. In the decade of the 90s, reductions in force

structure will be a reality. The forward basing structure will be one of forward presence. This will significantly enhance the importance of sealift and airlift capabilities.

If we look beyond Europe, we still see that the military strategy of the United States is global. It is based on binding military agreements with many other countries. These agreements in the 90s will be met with a forward presence of forces in critical areas, such as Japan and Korea and with rapid reinforcement of those forces in time of war to permit forward engagement and successful outcome of hostilities. However, a significant number of U.S. commitments are located in the Third World:

> Where even the most friendly local governments are often unwilling to accept the presence of U.S. military forces on their territory for fear of compromising their own domestic political legitimacy. This unwillingness is especially pronounced in Southwest Asia, widely regarded as the most logistically demanding of all potential theaters.[4]

Recent events have demonstrated that we must be able to project our forces to the Third World countries. In 1983, the United States was called on unexpectedly to rapidly deploy to Grenada, and most recently we have seen deployments to Honduras and Panama. As these recent events have shown, we can never be sure where the next requirement will be to ensure our national interests are not violated. "Therefore, our forces, plans and ways of thinking must be flexible enough to enable us to

respond to unexpected contingencies throughout the world. Our requirement for flexibility increases the importance of strategic mobility - our ability to deploy and sustain our forces over great distances."[5]

JOINT RESPONSIBILITIES

The strategic mobility capabilities of the United States are comprised of sealift and airlift assets and prepositioning of forces and equipment. This is a joint process with sealift being a Navy mission, airlift the responsibility of the Air Force and prepositioning of forces and equipment primarily an Army mission. A strong and viable triad is absolutely essential to the success of our military strategy and to the execution of our military contingency plans. There is no plan for an overseas military operation that does not require the use of at least one aspect of this triad, if not all simultaneously.

Can our strategic triad meet our world wide commitments? Brig. Gen. John C. Bahnsen stated that "when current strategic lift capabilities of the Navy and Air Force are examined, 'mercy' is exactly the right word to describe the Army's current plight."[6] However, even if it is assumed that sufficient lift will be there when needed, units still have to move to the ports of embarkation in a timely manner.

THE NEED

The transition from a peacetime to a wartime posture begins with the movement from origin to the sea and aerial ports of embarkation. This involves the total Army - active Army, Reserve and National Guard. It also includes the other services. In executing contingency plans, many reserve component units are scheduled to deploy before active duty units. Active duty and reserve units must be capable of moving their personnel, equipment, and supplies from installations and mobilization stations to the ports of embarkation. To achieve deployment movement objectives, units must plan in peacetime if movement schedules are to be executed during mobilization. An integral part of this process is to train for deployment. This is a fundamental responsibility at all levels of command within the defense establishment. It ensures that there are capable deployment planners in units who, in fact, can prepare and successfully move their units to the ports on time. After arrival in the port area are prepared to assist in the loading of equipment and supplies to ensure timely departure.

The intent of this paper is to first show the need for unit deployment training. General Vuono has stated that "The Army training mission is to prepare soldiers, leaders, and units to deploy, fight, and win in combat at any intensity

level anywhere and anytime."[7] Deployment training ensures that the force, after alert notification, can be flowed to and thru the ports of embarkation for the overseas theater of operations to win the war. Secondly, the paper will provide a recommendation on how the deployment training objective should be accomplished.

In the fulfillment of these objectives, this paper will first take a look at the current strategic mobility asset picture and past deployment exercises. This determines the criticality of need for a deployment training program. Then, the paper will assess the training currently available.

ENDNOTES

1. John T. Correll, "The Power Projection Shortfall," Air Force Magazine, August 1988, p. 38.

2. Jeffrey Record, "View From the Fourth Estate - Getting There," Parameters, June 1988, p. 89.

3. Ibid., p. 91.

4. Ibid., p. 91.

5. Michael P. Stone, "Deterrence Thru Deployment," Defense Transportation Journal, December 1988, p. 12.

6. John C. Bahnsen, Jr. Brig. Gen. U.S.A-Ret., "Mr. President We Can't Go!," Army and Navy Journal, October 1987, p. 112.

7. U.S. Department of the Army, Field Manual 25-100, p. 1-1 (hereafter referred to as "FM 25-100").

CHAPTER II

STRATEGIC SEALIFT

SEALIFT ASSETS

The strategic lift capabilities of the United States are comprised of sealift and airlift assets and the prepositioning of forces and equipment. In a contingency scenario requiring mobilization, sealift becomes the workhorse carrying the bulk of the supplies and equipment to the overseas theater of operation.

The Merchant Marine Act of 1920 provided the foundation for a robust merchant marine industry which was essential for domestic commerce and a strong national defense. This was later reinforced by the Merchant Marine Act of 1936 which stated that it was:

> necessary for the national defense and the development of its foreign and domestic commerce that the United States shall have a merchant marine (a) sufficient to carry its domestic water-borne commerce and a substantial portion of the water-borne export and import foreign commerce of the United States and to provide shipping service essential for maintaining the flow of such domestic and foreign water-borne commerce at all times, (b) capable of serving as a naval and military auxiliary in time of war or national emergency, (c) owned and operated under the United States flag by citizens of the United States insofar as may be practicable, (d) composed of the best equipped, safest, and

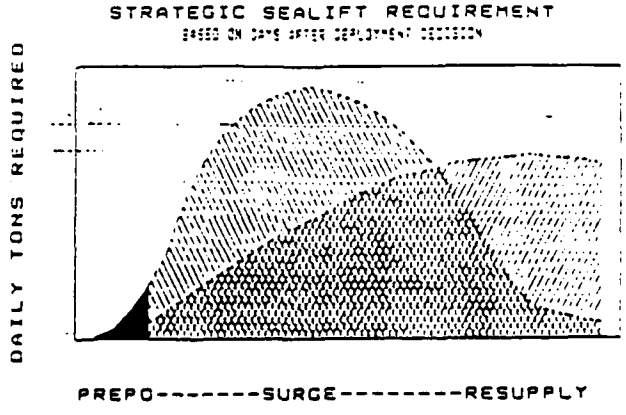
> most suitable types of vessels constructed in the United States and manned with a trained and efficient citizen personnel, and (e) supplemented by efficient facilities for shipbuilding and ship repair. It is hereby declared to be the policy of the United States to foster the development and to encourage the maintenance of such a merchant marine.[1]

These acts provide the cornerstone of United States maritime policy today.

The United States Army Posture Statement for FY90/91 states "Strategic sealift is required for 95 percent of our force deployment and resupply."[2] Strategic sealift in support of combat on "D Day" is defined as "surge shipping."[3] The greatest peak demand in total ships and tonnage to be moved would be placed on the merchant marine fleet at this time. It is this imminent need to move massive amounts of equipment, vehicles, aircraft, and petroleum products that requires ships be immediately available. It requires ships capable of handling containerized as well as non-containerized unit equipment. United States force planning goals for the reinforcement of Europe call for the movement from CONUS of an additional six Army divisions, 60 Air Force tactical fighter squadrons, and one Marine amphibious brigade. This includes all of their combat and combat service support. "To bring the magnitude of this surge requirement into perspective the

largest intercontinental movement during World War II was Operation TORCH. This was the direct movement from the United States and Great Britain of 107,000 troops."[4] The criticality of this with respect to today's movement requirements is that it will take all eight of our SL-7, fast sealift ships, to transport one mechanized division.[5] Follow-on sealift requirements to sustain combat operations are titled "sustainment shipping."[6] Figure 2-1 highlights the peak demands on surge shipping during the onset of hostilities. It tapers off as combat forces are delivered to the front. The follow-on resupply shipping requirements to sustain the forces increase and then stabilize as consumption rates level off.[7]

Figure 2-1



Our current strategic sealift posture to support surge and resupply shipping requirements is in a state of crisis. It is declining in every area - - ships, manpower, and shipbuilding and repair facilities.

In support of global contingency operations the United States military requires dry cargo ships and tankers capable of carrying petroleum products. Only dry cargo ship capacities will be addressed in this paper. The fleet of ships available for this mission comes from the following sources: (a) the United States Flag Merchant Marine, (b) ships under charter to the Military Sealift Command (MSC), (c) the Ready Reserve Fleet (RRF), (d) the National Defense Reserve Fleet (NDRF), (e) ships owned by United States businesses under foreign registration, the U.S. Controlled Fleet (EUSC), and lastly the (f) merchant fleet owned by our allies.

Figure 2-2 shows the current status of NATO's strategic sealift capacity-dry cargo.[8]

Figure 2-2

NATO's Strategic Sealift Capacity

(Dry Cargo Only; Bulk Cargo Ships Excluded)

	Number of ships		Capacity (1,000 tons)	
	1979	1989	1979	1989
US flag	280	154	4,954	3,946
MSC controlled	30	40	374	941
RRF	6	81	73	1,359
EUSC	44	19	343	294
NDRF	168	114	1,801	1,311
US sub total	528	408	7,545	7,851
NATO	4,006	1,477	36,341	18,851
Total	4,534	1,885	43,886	26,702

The comparison shows a significant decrease in the number of ships available for use, a decline of available ship assets

of 59 percent since 1979. It also shows a significant decrease, 39 percent, in the tonnage that can be moved. An examination of U.S. shipping assets provides a clearer picture of sealift capabilities.

With a Presidential declaration of a national emergency, the 154 U.S. flag merchant marine ships will be made available to the Military Sealift Command. This increases the total ships immediately available for surge shipping to 194 when the MSC controlled ships are taken into account.[9] However, this total figure is reduced when one considers that these ships may not be in port, readily available for loading. They may have to be recalled from overseas ports or repositioned from other stateside ports. Then, they may have to be unloaded before loading of military cargo can take place.

The (EUSC) assets are considered to be available to the Department of Defense in a national emergency. However, these assets are crewed by foreign nationals and sail under foreign flags. They may or may not be available "depending upon the nature of the crisis, the issues involved and the country or countries involved."[10]

Our maritime reserve forces are small; they are a composite of two fleets. The Ready Reserve Fleet are ships that are maintained in a 5, 10, or 20 day recall status. They

would be readied and available for reactivation and crewing at designated shipyard and repair facilities in the event of mobilization.[11] The point is that it will take time to activate these ships and there are only 81 available for mission assignment. The second segment of our reserve forces and probably the most problematic is the National Defense Reserve Fleet. These ships are old and outdated; they have been mothballed with no upgrades and only limited maintenance being performed. Of the 114 available, the majority are old World War II Victory ships. Their utility in the event of a national emergency is questionable, as it would take considerable time, 60 or more days, to make them seaworthy for a mission.[12]

The NATO fleet of ships is sizable, and the NATO countries are committed to providing the U.S. shipping assets in a case of a major military commitment. However, there is reason for concern. The NATO fleet is also declining as more ships are also placed under flags of convenience. As with the U.S., the NATO countries are not sure whether the reflagged ships will be available when needed.[13]

SEALIFT PROJECTION (2000)

The prognosis for sealift availability in the out years is not optimistic. The general cargo fleet assets which include U.S. Flag Merchant fleet and the MSC fleet is projected for a continuing decline with some estimates of a 55 percent reduction. But more importantly is a projected decline of 45 percent in deadweight tonnage. It is also predicted that by the year 2000 most of the NDRF fleet will have gone to the scrap pile with no funds or plans to acquire additional ships for the fleet. It is assumed that as some of the merchant fleet is retired from active service that they will be placed in the NDRF but there are no firm numbers. It is planned that the RRF fleet will have a modest increase to around 100 ships. The NATO fleet is also going through considerable reductions in size. Changing political conditions in the world today may alter NATO's commitment to provide ship assets.[14]

MERCHANT MARINER'S PROJECTION

The outlook for our sealift assets is not encouraging and "the lack of merchant mariners in the near term could impede our ability to adequately project and sustain forces by strategic sealift."[15] The basic problem is that there are

not enough trained personnel in the seafaring occupations and it is projected to worsen. It is estimated that there is a shortage of 2000 licensed and unlicensed crew members to support a mobilization today. This shortage becomes exacerbated with an estimated need for 8100 crew members for surge and sustainment operations for a 1992 mobilization. This is compounded by the fact that ships in the RRF and NDRF fleets require seafaring skills that are no longer required to operate today's newer fleet of merchant ships. The result is that it may be difficult to crew these ships should we mobilize. Lastly, because crew jobs are shrinking on the larger vessels in the maritime fleet, there are not as many job opportunities available. As a result, there are fewer and fewer personnel entering the seafaring occupations. Concurrently, today's work force is getting older and as they retire their experience will be lost. The concern is that there is not enough replacement numbers in the pipeline; they simply do not exist. In the event of mobilization, it could become an insurmountable problem.[16]

SHIPBUILDING AND REPAIR OUTLOOK

It is a recognized fact that we need additional ships now to bolster our maritime fleet. During hostilities the problem

of battle damage to our merchant marine fleet could substantially reduce our already limited assets. The United States shipbuilding industry is currently going through a recession, a result of United States shipbuilders being priced out of the market. This is largely a result of foreign governments subsidizing their shipbuilders, but it is also due to the advantage of cheaper labor markets that foreign shipbuilders enjoy. In 1987, the only ships built in United States shipyards were for the Navy. As a result of this continuing decrease through the years, the number of shipyards capable of handling new construction or repair work on vessels over 400 feet in length and 12 foot draft has also declined. In 1987 there were only 117 shipyards capable of providing repair and new construction in the event of mobilization. Of greater concern is the fact that many of these physical plant facilities have been lost forever and so has the mobilization base. Concurrently the shipyard manpower base has been significantly reduced. Lost are many of the skilled professionals that are needed. A look in the out years does not see an optimistic picture. There had been hope that with continuation of the Navy buildup to a 600 ship force, the precipitous decline in the shipbuilding industry would not continue. However, with a reduction in the Department of

Defense's budget it appears the shipbuilding industry is in for some more hard times.[17]

The maritime industry outlook in the short term is somber. The asset picture and number of ports available is inelastic. The flexibility in the deployment system remains with the units in their movement to the port of embarkation.

MOVEMENT TO THE SEAPORT

The United States maritime industry today cannot meet the shipping requirements for surge or sustainment operations in the event of a total mobilization. As a result, there may be unit substitutions and changes in the force movement schedules. A unit with an effective training program in deployment operations and a sound unit movement plan will meet vessel loadout schedules, and be able to quickly adjust to changes with little or no delays encountered. The cost of errors in a mobilization deployment might be a delay in a vessel sailing or of much greater concern the unit's equipment might be left at the port.

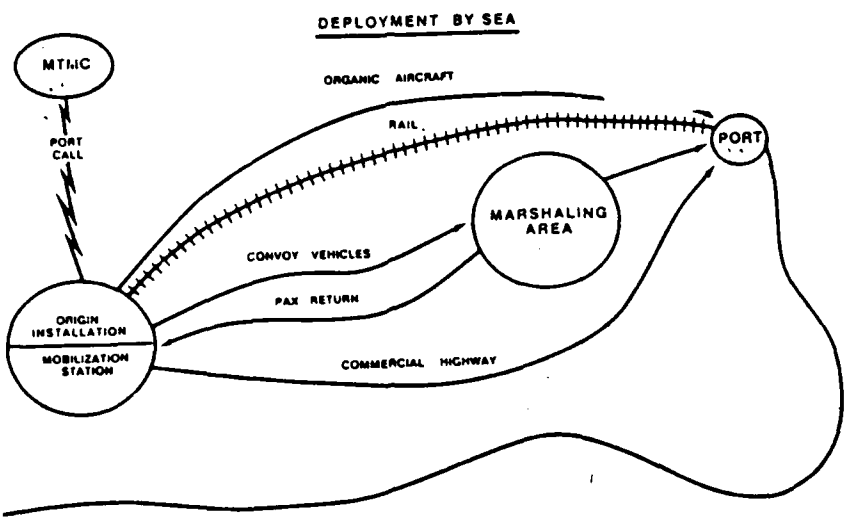
Under a mobilization contingency, it is imperative for deploying units to meet port arrival schedules and minimize delays. The responsibility is the installations, mobilization stations, and units to train their personnel and develop sound deployment plans.

As the unit prepares for deployment, it must consider such general activities as: load planning, updating its automated unit equipment list (AUEL), logistics application marking and reading symbology (LOGMARS), weighing and marking vehicles, reducing vehicles, securing secondary loads and safety. During the deployment on REFORGER 88, of the 981 pieces of equipment shipped by one unit, 500 pieces were frustrated off the railhead at the port. This was due to inaccurate AUEL data on LOGMARS labels, maintenance breakdowns, and hazardous cargo documentation and packing problems. On the same deployment, there were over 75 AUEL changes not given to the port.[18] History has recorded that documentation errors on shipments in the Korean and Vietnam Wars caused insurmountable problems when the equipment and supplies reached the theaters of operations. Much of the equipment became frustrated and never reached its intended destination. These errors can be prevented through the training of unit personnel in deployment activities.

Movement to the POE will be by commercial truck, rail, convoy or a combination of the three methods. Organic aircraft are flown to the port. Technical excellence in the fundamentals of railroading and convoy procedures are a must. Training insures proficiency in the fundamentals of those

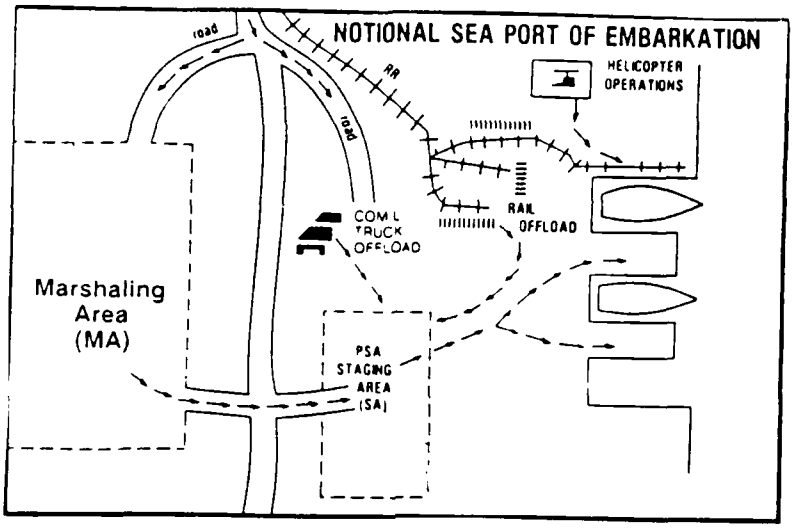
procedures. Figure 2-3 depicts the transportation means available for movement to the POE after a port call is received from the Military Traffic Management Command (MTMC).

Figure 2-3



Once in the ocean terminal area, the unit plan must not overlook the staging of the unit at a marshalling area, as at many ports there is not enough space to stage a unit or units in the terminal area. Figure 2-4 depicts a notional sea port of embarkation. It is easy to visualize the "fog of war" descending on the POE because of the congestion and number of activities taking place at the port.

Figure 2-4



In the marshalling area, units make final preparations for overseas movement. These activities include but are not limited to: billeting and messing for personnel, preparation for hazardous and sensitive cargo, updating the automated equipment lists, vehicle maintenance, reducing vehicles to specified shipping configurations, and security. Finally, planning should have included port support activity and supercargo duties.

The individual in the unit that is responsible for preparing and training unit personnel for a deployment contingency or multiple contingencies is the unit movement

officer. In most units this is a part time job, an additional duty, and normally there is a rapid turnover of personnel in this type of assignment. To ensure that there is not a significant gap between higher level planning and unit level execution, unit movement personnel must receive comprehensive training. It should include all those activities required to get the unit to the POE and loaded aboard a vessel.

ENDNOTES

1. Jeremiah A. Denton, Sen., Report of the Commission on the Merchant Marine and Defense, 30 September 1987, p. 8.

2. John O. Marsh, Jr. Hon. and Carl E. Vuono Gen., The United States Army Posture Statement FY 90/91, p. 61.

3. Denton, p. 16.

4. Jeffery Record, "View From the Fourth Estate - Getting There," Parameters, June 1988, p. 91.

5. Larry Grossman, "Slow Going for the Fast Sealift," Military Forum, March 1989, p. 50.

6. Denton, p. 16.

7. Ibid., p. 16.

8. Benjamin F. Schemmer, "Airlift, Sealift in Short Supply at Very Time Need Grows Fastest," Armed Forces Journal International, May 1989, p. 66.

9. Denton, p. 28.

10. Ibid., p. 29.

11. Ibid., p. 29

12. Ibid., p. 33.

13. Ibid., p. 30.

14. Ibid., pp. 31-33.

15. Scott C. Truver, "Sealift Manning Critical Period, Critical Choice," Armed Forces Journal International, July 1987, p. 30.

16. Ibid., pp. 34, 36.

17. Denton, pp. 36-40.

18. Dale A. Hueber, "TDY Trip Report-REFORGER 88, Beaumont, TX. (SPOE)," Chief Surface Deployment Division, Joint Strategic Deployment Center, 19 August 1988, Incl. 2.

CHAPTER III

STRATEGIC AIRLIFT

AIRLIFT CAPABILITIES

The airlift requirement in the event of mobilization is enormous. The airlift shortfall is critical. It has increased over the years as the Army's airlift requirements have grown. Figure 3-1 identifies the creep in weight for Army units.[1]

Figure 3-1

Weight Growth of Army Units

(Weight in Tons)

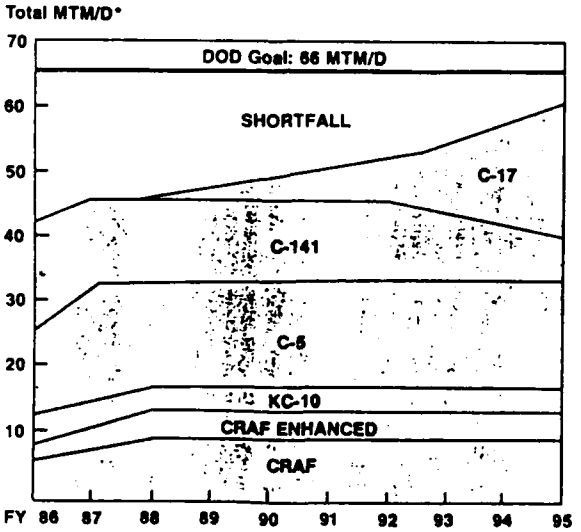
As of:	Mech Div	Abn Div	Air Assault Div
1980	66,748	17,724	15,900
1981	73,099	–	–
1985	93,373	22,783	30,215

The Army's airborne, air assault, and mechanized divisions have all grown in size since 1980: "the 82nd Airborne Division is 29 percent heavier; the 101st Air Assault Division is 90 percent larger; and the mechanized divisions are 40 percent heavier."[2] The result is that it takes more airlift to move these units to the combat area. However, there has not been a

corresponding increase in the total lift capability over the same period of time. The Air Force's strategic mobility airlift assets are comprised of 350 C-5s, C-141s, and KC-10s and civil reserve airline fleet (CRAF) aircraft-selected commercial aircraft especially configured to handle military cargoes.

The current Air Force strategic airlift goal in support of a mobilization contingency is 66 million ton-miles a day (MTM/D). Military Airlift Command's (MAC's) airlift capability today is only 46 MTM/D, a shortfall of 20 MTM/D.[3] Figure 3-2 highlights the shortfall in the U.S. goal for intertheater cargo airlift.[4]

Figure 3-2



Air Force plans hold that with the fielding of the C-17 by 1995 the goal of 66 MTM/D will be met. However, there are some military mobility experts who have said that a more realistic

cargo airlift goal would be 100 to 125 MTM/D. The military's senior leadership, the Joint Chiefs of Staff, have "specified a requirement of 150 MTM/D for NATO's reinforcement alone; even a regional conflict in Southwest Asia that did not directly involve Soviet forces would consume an estimated 98 MTM/D, or more than twice the capacity now on hand and half again as much as that even planned by the end of the century."[5] With budget reductions a reality for the 1990s, the fielding goal for the C-17 for the 1990s may be unrealistic. The point is that "MAC is now 30 percent short of its interim, budget constrained goal of 66 MTM/D, a compromise figure that came out of the 1981 Congressionally Mandated Mobility Study."[6] With a delay in the fielding of the C-17, "the shortfall will begin to grow again because the projected production of C-17s will not keep pace with the retirement of older aircraft."[7]

AIRLIFT CREWS

Not only are we in trouble with not enough aircraft to move the required tonnages to respond to a contingency, but there may not be enough pilots in the system to fly the equipment. General Cassidy has stated "pilot retention rates (cumulative retention for pilots with six to eleven years) have declined from seventy-nine percent in FY '83 to thirty-nine

percent in FY '87."[8] He further projected the retention rates in the out years looked just as gloomy. Realistically, there will never be enough airlift. Planners must put what lift is available to the best possible use.

OPERATION URGENT FURY

In the fall of 1983, the 2d Battalion of the 325th Infantry, 82nd Airborne Division was executing a deployment for "operation URGENT FURY", the invasion of Grenada. The unit quickly found itself bogged down with problems at the aerial port of embarkation:

> the unit lost an hour and a half clearing their designated corps marshaling area of the equipment from an engineer unit that had just returned from off-post training. After the gear had been issued and the packing process completed, they began a two-mile march to the airfield, during which it quickly became apparent that their loads were too heavy for combat.
>
> Later, as the soldiers straggled onto the airstrip, they found 12 locked C-141's with no crews in sight- and the planes were not rigged for the parachute assault Colonel Hamilton, (the Battalion Commander), thought he and his men would have to make. "The marshalling operation sometimes seemed like a setting in practicing Murphy's Law, Hamilton said."[9]

The 2d Battalion seemed to go from one crisis to another; the problems and uncertainties in the deployment were caused by little things. As Clausewitz states "Everything in war is very simple, but the simplest thing is difficult. The difficulties

accumulate and end by producing a kind of friction that is inconceivable unless one has experienced. war."[10] The frictions and uncertainties in a deployment can only be mitigated by careful planning and training. Clausewitz goes on to say "countless minor incidents - - the kind you can never really foresee - - combine to lower the general level of performance, so that one always falls short of the intended goal."[11] In the early stages of a mobilization scenario most of the combat forces and equipment will move by air. Would "countless minor incidents" bring the air deployment machinery to a halt? Experience has shown that a unit that has trained and prepared itself for air movements will minimize those incidents that cause impediments to a successful deployment.

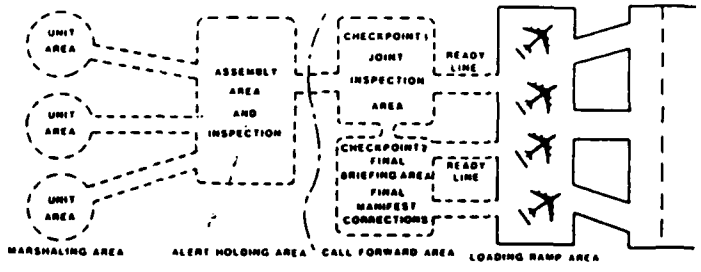
MOVEMENT TO THE AERIAL PORT

In preparing for a deployment by air, a unit must consider the same general activities that it considered for a deployment by sea. A significant exception is that the unit must prepare its own loadplan for loading of the aircraft. This is a very technical and critical task. However, the "war stopper" in airlift operations is the unit's ability to prepare and accurately mark its equipment, ensure vehicle maintenance has been performed, pallets have been built within weight and

height restrictions and execute the loadout. Once in the air port of embarkation units will accomplish the final preparations prior to loading. Figure 3-3 portrays a notional aerial port of embarkation.

Figure 3-3

NOTIONAL AERIAL PORT OF EMBARKATION



In the unit area and assembly area, the unit accomplishes the same basic tasks that it did at the seaport staging areas. In the call forward area of the departure airfield, a joint inspection with the Air Force of unit equipment is conducted. Also manifests are reviewed for accuracy and a final briefing is provided to the deploying troops. The responsibility for planning, preparing, and training the unit personnel for an air deployment is the Unit Movement Officer.

ENDNOTES

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8. Correll, pp. 41-42.

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CHAPTER IV

LESSONS LEARNED

NIFTY NUGGET

On a fall morning in October 1978, the United States was preparing to go to war with exercise NIFTY NUGGET. This was to be an extensive wartime mobilization exercise, but conducted as a computer and paper exercise. It was the first such full-blown mobilization since World War II. "Conducted by the Joint Chiefs of Staff (JCS), NIFTY NUGGET was designed primarily to examine the adequacy of plans, systems, and procedures for full mobilization and deployment, and examine limitations and shortfalls in manpower and logistics."[1] The lessons learned during the exercise provided a grim picture of United States' capability to mobilize, and actually transition to war.

Units such as the 3397th U.S. Army Garrison, Chattanooga, Tennessee were to receive units at Camp Shelby, Mississippi, organize, train, and then send them to war. The first problem encountered would have stopped actual deployment operations at Camp Shelby. The installation did not have a railroad siding or unloading docks large enough to receive M60 tanks and armored personnel carriers.[2] These shortfalls should have

been identified in the planning process. The deficiencies could have been corrected or deployment plans could have been changed.

The exercise uncovered that units did not possess sufficient blocking, bracing, packing, crating, and tie-down (BBPCT) equipment and related equipment, such as hand tool sets, rail car spanners, and portable ramps. Some installations had overstocked BBPCT and some used predesignated funds for other purposes. Many installations did not know how to compute BBPCT requirements. Finally, it demonstrated that shipping delays and snarls were not only the result of a decaying rail system and a decentralized trucking system but also the result of inadequate deployment planning by installation and unit personnel.[3]

As this exercise demonstrated, movement plans were inadequate and unable to cope with the changes required of a fluid situation. More importantly it established that there was a critical need to train those personnel that are involved in deployment operations. Prior preparation assures that a unit will not be burdened with urgent problems at deployment when they should be free to focus on the employment of the organization for the combat operation.

GAO SURVEY RESULTS

More recently, the General Accounting Office in a 1987 report to the Secretary of the Army stated that "it was questionable whether many Army units (could) accomplish mobilization movements as planned."[4] In its investigation of deployment operations, the GAO looked at the total force package - active Army, U.S. Army Reserve and Army National Guard. It found that better transportation planning would be needed if the Army was to successfully meet its deployment objectives. The primary findings were:

* units had not identified all the equipment requiring commercial transportation for movement to the mobilization stations.
* the mobilization stations had not determined the commercial transportation needed to move the equipment to ports of embarkation.
* the reserve component units had not developed or tested load plans or requested commercial transportation to accomplish their moves.
* better plans were needed for distributing outloading materials and equipment to the loading site.
* requests for commercial transportation were inaccurate and inconsistent.[5]

TEAM SPIRIT 88 OBSERVATIONS

An exercise, TEAM SPIRIT, conducted yearly in Korea provides additional data to illustrate problems encountered by deploying units. Identified below are the more significant observations of deployment operations for TEAM SPIRIT 88:

* most units deploying to the SPOE did not conduct organized convoy operations.
* internal cargo loads on organizational vehicles were improperly secured and protected. This resulted in damage to internal cargo and in some cases thefts.
* hazardous cargo was improperly loaded, secured, and documented.
* most vehicles in one particular unit rail load out were improperly secured.
* LOGMARS documentation labels were in many cases in error. This frustrated equipment at the port and delayed outloading.
* the port support activity at the port was not staffed to correct vehicle/equipment and internal load deficiencies.[6]

Many of the same deficiencies were identified on assessment visits for REFORGER 88 and TEAM SPIRIT 89.

PERSONAL EXPERIENCE

From my own experience, as a Movement Control Battalion Commander in Korea during the period 1986 thru 1988, I observed many of the same problems. These were encountered not only as

the units came through the ports of debarkation, but more importantly on the deployment of the units to the United States. The problems were in rail loading, convoy procedures and documentation, with the most significant being the planning for the redeployment. This is a replica of a deployment only in reverse. However, it is probably more realistic, as planning time is actually constrained as compared to a deployment exercise. It was obvious in many cases that the units had not prepared for the deployment and redeployment. Also, there had been little if any training of unit personnel in movement procedures. On the other hand, we provided training in several of the movement disciplines, i.e. railroading and convoying, for the 2d Infantry Division on a regular basis. This was intensified in preparation for exercise TEAM SPIRIT. The result was the division had few problems on in-country deployments.

Deployment operations are the bridge between mobilization and the force projection in the overseas theater. They begin the logistical momentum of combat. As has been documented, difficulties still exist in deployment operations; things do and will continue to go wrong. Inaccurate documentation, no tools, wrong place, late destination arrivals will cause delays, confusion and can even result in defeat of national

goals in some measure. It takes technical training, functional knowledge, and hard work to get the forces from origin to the overseas theater. "The end for which the soldier is recruited, clothed, armed, and trained, the whole object of his sleeping, eating, drinking, and marching is simply that he should fight at the right place and at the right time."[7] If deployment operations fail, the soldier will not be there to fight.

THE LOW COST OPTION - TRAINING

Deployment operations are critical to victory or defeat and require attention at all levels to assure preparations have been accomplished. The evidence presented corroborates that units continue to have significant problems when it comes time to deploy for a peacetime exercise. It probably is going to be the nature of things when we have to mobilize. The LOW COST OPTION to minimize problems when it comes time to deploy is to TRAIN. This is a double edge requirement. First, the movements personnel in the unit have to be trained. This should be in a formal environment taught by professionals. Then, they become the trainers to train the unit. The initial undertaking is to identify those deployment external directives that relate to the units wartime mission. Once identified the tasks should be inputs to the units mission essential task list

(METL). The METL then becomes the primary document for unit deployment training.

ENDNOTES

1. Walter R. Shope, LTC. USA, "The Lessons of NIFTY NUGGET," Defense, December 1980, p. 17.

2. John J. Flakla, "The Grim Lessons of NIFTY NUGGET," Army, April 1980, p. 17.

3. Ibid., pp. 17-18.

4. United States General Accounting Office, Report to the Secretary of the Army, Army Deployment, Better Transportation Planning Is Needed, June 1987, p. 3. (hereafter referred to as "GAO Army Deployment").

5. Ibid., pp. 16-26.

6. Hueber, pp. 1-3.

7. Howard and Paret, p. 95.

CHAPTER V

UNIT MOVEMENT TRAINING

Is unit movement training included as one of the concerns of the warfighters? If it is a critical factor to force projection but not treated as such, disaster looms. The warfighter commander has the ultimate responsibility to get his unit to and thru the ports of embarkation. However, commanders generally do not understand the need for or use of unit movement data in the planning process. As a result, a low priority is usually assigned to movements planning and training the unit for deployment operations.[1]

When a unit deploys for a peacetime exercise, usually a great deal of preparation and planning is required. To ensure that in the event of a mobilization contingency, a unit can deploy to the overseas theater on schedule, a great deal of planning and preparation is also required. School trained unit movements personnel and an effective unit movement training program can guarantee success in the deployment environment. The ultimate responsibility is the unit commander's.

An Army preparing for deployment should train according to currently approved guidance, rules and established doctrine. These rules, procedures, techniques, and common knowledge are first learned in a formal school training program and then honed in the unit training program.

The key individual in the unit is the Unit Movement Officer, UMO. The UMO is responsible to prepare and maintain appropriate documentation, unit loading plans, and to handle all other arrangements for a unit movement.[2] Then, as the operators of the deployment system, the UMOs, must be formally school trained. This is essential, as, the UMO becomes the focal point to train the unit in deployment operations.

There are several deployment training programs currently available in the Department of Defense. The first program to be discussed is conducted by the Joint Strategic Deployment Training Center at Fort Eustis. This program provides resident and nonresident deployment training to personnel charged with planning and executing OPLANS. There are two courses being taught. The first is the Surface Deployment Planning Course. It is a two week course designed in building block fashion to bring the (UMO)/UMONCO from home station to the port of embarkation, and from the port of debarkation to the marshalling area in the theater of operations. The course has

developed an emphasis on planning, coordinating, and executing movement plans, and is constructed around four annexes: Movement Planning, CONUS Highway Operations, Rail Deployment Operations, and Marine Terminal Operations. The second course is the Air Deployment Planning Course. It is a three week course which produces a qualified air load planner. The course emphasis is on preparation of unit equipment and personnel for movement, and the load planning of cargo and personnel. The development of both of these courses was through the Training and Doctrine Command, TRADOC, Systems Approach to Training. This program approach to training provides the requirements for the evaluation, analysis, design, development, and implementation of Army training.[3]

The Army Reserve Readiness Training Center, Fort McCoy teaches a two week Unit Movement Officer Course. This course combines Forces Command, FORSCOM, policy and hands on training to include loading of trucks, rail, aircraft and barges, and convoy planning. The course is structured to provide the skills and knowledge necessary to properly plan and execute unit movements. This course was not developed through the systems approach to training.[4]

Additionally, there are unit movement courses taught at Fort Campbell and Fort Hood which come under the purview of

FORSCOM. These courses have been developed by the local installations to support the divisions and supporting units at these respective installations. In both cases, these courses are taught by contractors. The course at Fort Campbell is a three week course which provides instruction in railroading, convoy movements, automated unit equipment listing, airload planning and unit movement planning. This course was not developed through the TRADOC systems approach to training. The contractor, Non Public Education Services, would not release the Program of Instruction for review.[5]

In addition, many installations provide unit movement officer training. However, in most cases, this training is an orientation to the requirements for keeping a unit movement binder, (pass the inspection syndrome), as opposed to in-depth doctrine and hands-on training.

The knowledge and skills acquired by the UMO/UMNCO through the formal school learning process are the basis for the development of the unit's movement plan and the unit deployment training program. The commander establishes his peacetime training requirements from his battle focus of the unit's war plans and external directives.[6] Deployment operations, as an external directive, are one of the additional sources of training tasks that relate to a unit's wartime mission. The

UMO's responsibility is to ensure that the fundamentals of deployment operations are in the unit's METL. This becomes the blueprint for the unit's training program in deployment operations.

Knowledge and proficiency in both air and surface deployment operations is meaningful to a unit. However, a unit should concentrate training efforts according to its specific deployment mission. This will ensure that the unit has the technical competence when the time comes to deploy.

ENDNOTES

1. Department of Army, Conus Mobility Management Working Group Report: Recommendations to Improve the Army's Mobilization and Deployment System, p. 6. (hereafter referred to as "Conus Mobility Management Working Group Report).

2. U.S. Department of the Army, Field Manual 55-65, p. 13. (hereafter referred to as "FM 55-65").

3. Interview with Dale Hueber, Capt., Joint Strategic Deployment Training Center, Fort Eustis, 20 November 1989.

4. Army Reserve Readiness Training Center, Fort McCoy, Program of Instruction, USAR Movement Officers Course, 2 October 1989.

5. Phone interview with MR. Angus, Unit Movement Section, Installation Transportation Office, Fort Campbell, KY, 22 November 1989.

6. FM 25-100, p. 2-1.

CHAPTER VI

CONCLUSIONS AND RECOMMENDATIONS

To support our worldwide contingency requirements it is necessary that the military be capable of rapid deployment. With possible force structure cuts looming in the out years, it will become increasingly important that active and reserve units be maintained at a state of deployment readiness.

Many of the lessons learned and much of the deployment experience has come from the yearly exercises such as TEAM SPIRIT and REFORGER. Although REFORGER will be conducted this year, it will be at a much reduced scale. Much of the unit equipment will be kept at home. Deployment managers who had previously been able to use this exercise and others to refine and hone unit deployment skills will lose this valuable training opportunity. As budgets are trimmed in the future, exercises will be scaled down, and those that are conducted will probably involve much less equipment being shipped. The key to maintaining deployment proficiency is that the UMO and UMNCOS are trained in the technical and fundamental aspects of deployment operations. Then, as the unit deployment managers, they establish effective deployment training programs according

to their unit METL. As Clausewitz states in his On War, "routine, apart from its sheer inevitability, also contains one positive advantage. Constant practice leads to brisk, precise, and reliable leadership, reducing natural friction and easing the working of the machine."[1] Redundancy in training, in those skills that are required to deploy a unit, will ensure a smooth and efficient unit deployment machine.

There are several formal unit movement training programs currently being taught. The institutional training program at Fort Eustis was established according to approved deployment doctrine and under the purview of the TRADOC systems approach to training. This process consists of the following four interrelated phases: analysis, design, development and implementation.[2] This ensures that standardization is accomplished through the application of uniform procedures.

The other programs are under FORSCOM and have not been developed in accordance with the systems approach to training. These programs have been developed according to the needs of the various installations. They have been done in isolation and may not completely tie together deployment doctrine, missions and current deployment systems.

There needs to be a coordinated blueprint between TRADOC and FORSCOM for deployment training. I recommend that the

Joint Strategic Deployment Center at Fort Eustis be designated as the core training site. The Center would provide resident and non resident training. The training sites that have been set up at Fort Campbell, Fort Hood and at Fort McCoy, the Army Reserve Readiness Training Center would become satellite training sites under the auspices of Fort Eustis. Additionally, training sites could be set up at the other divisional units. These programs could either be run by the installation or contracted out. In either case, at all the satellite training sites the Program of Instruction would be standardized and the practices and procedures being taught would be uniform in accordance with current deployment doctrine. From this base the satellite sites could assist the units in the deployment of their unit movement training programs.

ENDNOTES

1. Howard and Paret, p. 153.

2. U.S. Department of the Army, Training and Doctrine Command, Training and Doctrine Regulation 350-7, pp. 2-3, 2-4.

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11. Hueber, Dale, Capt., "TDY Trip Report-Reforger 88, Beaumont, TX. (SPOE), "Surface Deployment Division, Joint Strategic Deployment Center, 19 August 1988.

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